

*West Virginia Department of Environmental Protection  
Division of Air Quality*

*Joe Manchin III  
Governor*

*Stephanie R. Timmermeyer  
Cabinet Secretary*

# General Permit Registration



*Pursuant to  
**Title V**  
of the Clean Air Act*

**Columbia Gas Transmission Corporation  
Lost River Compressor Station  
R30-NGGP-2007-03100002  
Effective Date: November 28, 2007**

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*John A. Benedict  
Director*

**Date Signed: November 14, 2007**

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Registration Number: **R30-NGGP-2007-03100002**  
Permittee: **Columbia Gas Transmission Corporation**  
Facility Name: **Lost River Compressor Station**  
Mailing Address: **1700 MacCorkle Avenue, SE**  
**Charleston, WV 25314**  
Permit Contact: **Kasey Gabbard, NiSource EH&S**  
Telephone: **(304) 357-2079** Fax: **(304) 357-2770**

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*This Registration is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this Registration and of Permit Number R30-NGGP-2007.*

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Facility Location:	Mathias, Hardy County, West Virginia
Mailing Address:	419 Upper Cove Road, Mathias, WV 26812
Telephone Number:	(304) 548-1674
Type of Business Entity:	Corporation
Facility ID #:	031-00002
Facility Description:	Natural Gas Transmission Facility
SIC Codes:	4922
UTM Coordinates:	685.5 km Easting • 4305.1 km Northing • Zone 17

Permit Writer: Denton McDerment

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*Issuance of this Title V Operating Permit Registration does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.*

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## Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Natural Gas General Permit (R30-NGGP-2007) Sections
<b>Facility-wide</b>						<b>Section 2.0, Sections 3.1.1 to 3.1.8, 3.1.12 to 3.1.15, 3.3, 3.4, 3.5 &amp; 3.7, Section 18.0</b>
001-01 <sup>(1)</sup>	BL1	Heating System Boiler; Peerless 211A-20-WS	1997	3.99 MMBtu/hr	N/A	<b>Section 4.0</b>
001-03 <sup>(1)</sup>	BL2	Wastewater Evaporator Boiler	1997	0.20 MMBtu/hr	N/A	<b>Section 4.0</b>
001-02 <sup>(1)</sup>	HTR1	Fuel Gas Heater; NATCO SBW20-8D	1990	0.72 MMBtu/hr	N/A	<b>Section 4.0</b>
006-01	WE1	Water Evaporator Unit		50,000 gal/yr	None	<b>Section 4.0</b>
002-01 <sup>(1)</sup>	E01	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1953	1,320 HP	N/A	<b>R14-0013C</b>
002-02 <sup>(1)</sup>	E02	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1953	1,320 HP	N/A	<b>R14-0013C</b>
002-03 <sup>(1)</sup>	E03 <sup>(2)</sup>	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1953	1,320 HP	N/A	<b>R14-0013C</b>
002-04 <sup>(1)</sup>	E04	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1953	1,320 HP	N/A	<b>R14-0013C</b>
002-05 <sup>(1)</sup>	E05	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1954	1,320 HP	N/A	<b>R14-0013C</b>
002-06 <sup>(1)</sup>	E06 <sup>(2)</sup>	Reciprocating Engine/ Compressor; Clark HRA-8T; 2-cycle, lean burn	1954	1,320 HP	N/A	<b>R14-0013C</b>
002-07 <sup>(1)</sup>	E07	Reciprocating Engine/ Compressor; Clark TLA-8; 4-cycle, lean burn	1969	2,700 HP	N/A	<b>R14-0013C</b>
002-08 <sup>(1)</sup>	E08	Reciprocating Engine/ Compressor; Clark TLA-8; 4-cycle, lean burn	1969	2,700 HP	N/A	<b>R14-0013C</b>

Emission Unit ID	Emission Point ID	Emission Unit Description (Make, Model, Serial No.)	Year Installed	Design Capacity	Control Device	Applicable Natural Gas General Permit (R30-NGGP-2007) Sections
002-09 <sup>(1)</sup>	E09	Reciprocating Engine/ Compressor; Clark TLA-8; 4-cycle, lean burn	1970	2,700 HP	N/A	<b>R14-0013C</b>
002-10 <sup>(1)</sup>	E10	Reciprocating Engine/ Compressor; Clark TLAD-10; 2-cycle clean burn	1991	4,640 HP	N/A	<b>Sections 6.2.2, 6.2.3, 6.3.1 &amp; 6.4.1, R14-0013C</b>
002-11 <sup>(1)</sup>	G1	Reciprocating Engine/Generator; Ingersoll-Rang PVG-6; 4-cycle, rich burn	1952	306 HP	N/A	
002-12 <sup>(1)</sup>	G2	Reciprocating Engine/Generator; Ingersoll-Rang PVG-6; 4-cycle, rich burn	1952	306 HP	N/A	
002-12 <sup>(1)</sup>	G3	Reciprocating Engine/Generator; Waukesha VGF-48GL; 4-cycle, lean burn	2008	1,006 <b>HP</b>	N/A	
002-13 <sup>(1)</sup>	E11	Reciprocating Engine/ Compressor; Caterpillar G3616; 4-cycle lean burn	2008	4,735 <b>HP</b>	OC1 (OxCat)	<b>Section 14.0</b> <b>40 C.F.R. §§ 63.6595(a)(3), 63.6600(b)</b> <b>R14-0013C</b> <b><u>40 C.F.R. 60 Subpart JJJJ, 40 C.F.R. § 60.4233(e) &amp; emission limits on Line 5 of Table 1 of 40 C.F.R. 60 Subpart JJJJ, 40 C.F.R. §§ 60.4234, 60.4243(b)(2)(ii), 60.4244, 60.4245, 60.4246</u></b>

(1) All combustion equipment burns pipeline quality natural gas only.

(2) Engines shall be removed from service pursuant to R14-0013C , condition 4.1.6., but no later than May 1, 2009.

(3) Existing emergency generators, G1 and G2, shall be removed from service or rendered inoperable within 180 days from startup of replacement unit G3. *45CSR§14-2.46h.*

N/A – Not applicable

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**45CSR13/14 Permits, Consent Orders, and other specific requirements not included in Title V General Permit:**

1. R14-0013C
2. CO-R1-C-2007-4A (2005).
3. The permittee shall employ automatic control systems on the compressor engine No. 10 (Emission Unit ID 002-10) that will continuously monitor and control key engine operating parameters. These parameters include engine horsepower, speed, air manifold temperature, and fuel flow. These values are then used to determine the air manifold pressure that is required to achieve the specified air/fuel ratio and emission rate. As engine operating conditions change, the control system adjusts air manifold pressure to continuously maintain the required emission levels.  
**[45CSR§30-5.1.c.]**
4. Compliance with the NO<sub>x</sub> and CO emission limits set forth in R14-0013C, condition 4.1.4., shall be determined by conducting an emissions stack test of the Clark TLAD-10 engine identified as Source E-10, at least once during the Title V permit term, but, at least 180 days prior to the Title V permit expiration.  
**[45CSR§30-5.1.c.]**
5. The permittee shall maintain a record of equipment fuel consumption and hours of operation for each engine (E01 through E10). Said records shall be kept utilizing a twelve month rolling average, and shall be maintained on site or readily available location.  
**[45CSR§30-5.1.c.]**
6. The permittee shall maintain a record of operating hours for each of the boiler units (BL1 and BL2), the Fuel Heater (HTR1), and the Water Evaporator (WE1). Said records shall be kept utilizing a twelve month rolling average, and shall be maintained on site.  
**[45CSR§30-5.1.c.]**
7. **Emission Unit 002-13 (Emission Point ID E11) must comply with all applicable requirements set forth in 40 C.F.R. Part 60 Subpart JJJJ, including any future amendments.**  
**[45CSR16; 40 C.F.R. Part 60 Subpart JJJJ] [E11]**  
**Note: 40 C.F.R. Part 60 Subpart JJJJ is incorporated herein by reference. 40 C.F.R. Part 60 Subpart JJJJ as of February 3, 2009 is attached for informational purposes only.**

*West Virginia Department of Environmental Protection*  
*Division of Air Quality*  
*Joe Manchin, III*      *Stephanie R. Timmermeyer*  
*Governor*                      *Cabinet Secretary*

# Permit to Modify



**R14-0013C**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

Issued to:  
**Columbia Gas Transmissions Corporation**  
**Lost River Compressor Station**  
**031-00002**

  
\_\_\_\_\_  
*John A. Benedict*  
*Director*

*Issued: April 17, 2008 • Effective: April 17, 2008*

Permit R14-0013C

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Columbia Gas Transmissions Corporation • Lost River Compressor Station

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*This permit will supercede and replace Permit R14-0013B issued on August 8, 2007.*

Facility Location: Mathias, Hardy County, West Virginia  
Mailing Address: 1700 MacCorkle Ave., P.O. Box 1273, Charleston, WV 25325-1273  
Facility Description: Natural Gas Compressor Station  
SIC Codes: 4922  
UTM Coordinates: 685.5 km Easting • 4,305.1 km Northing • Zone 17  
Permit Type: Modification  
Description of Mod: Replacing two existing Clark HRA-8T compressor engines (emission points E03 and E06) with one Caterpillar G3616 compressor engine rated at 4,735 horsepower (emission point E11). Additionally, updating compressor engine No. 10 PM<sub>10</sub> emission limit to reflect revision to AP-42, Section 3.2 PM<sub>10</sub> emission factor.

*Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.*

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*The source is subject to 45CSR30. The permittee has the duty to update the facility's Title V (45CSR30) permit to reflect the changes permitted herein.*

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## 1.0 Emission Units

Source ID	Emission Point ID	Description	Make/Model	Engine Rating	Installed (year)
002-01	E01	Compressor Engine No. 1	Clark HRA-8T	1,320 hp	1953
002-02	E02	Compressor Engine No. 2	Clark HRA-8T	1,320 hp	1953
002-03 <sup>(1)</sup>	E03	Compressor Engine No. 3	Clark HRA-8T	1,320 hp	1953
002-04	E04	Compressor Engine No. 4	Clark HRA-8T	1,320 hp	1953
002-05	E05	Compressor Engine No. 5	Clark HRA-8T	1,320 hp	1954
002-06 <sup>(1)</sup>	E06	Compressor Engine No. 6	Clark HRA-8T	1,320 hp	1954
002-07	E07	Compressor Engine No. 7	Clark TLA-8	2,700 hp	1969
002-08	E08	Compressor Engine No. 8	Clark TLA-8	2,700 hp	1969
002-09	E09	Compressor Engine No. 9	Clark TLA-8	2,700 hp	1970
002-10	E10	Compressor Engine No. 10	Clark TLAD-10	4,640 hp	1991
002-13	E11	Compressor Engine No. 11	Caterpillar G3616	4,735 hp	2008

(1) Engines shall be removed from service pursuant to 4.1.6. no later than May 1, 2009.

## 2.0. General Conditions

### 2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

### 2.2. Acronyms

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2.5</sub></b>	Particulate Matter less than 2.5µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppmv or ppmv</b>	Parts per million by volume
<b>dscm</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **2.3. Authority**

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation*; and
- 2.3.2. 45CSR14 *Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*.

### **2.4. Term and Renewal**

- 2.4.1. This permit supercedes and replaces previously issued Permit R14-0013A. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

### **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R14-0013, R14-0013A, R14-0013B and R14-0013C, and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to; [45CSR§§13-5.11 and 13-10.3]
- 2.5.2. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

### **2.6. Duty to Provide Information**

The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

## **2.7. Duty to Supplement and Correct Information**

Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

## **2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4]

## **2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

## **2.10. Major Permit Modification**

The permittee may request a major modification to this permit as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§14-7 or 45CSR§19-14]

## **2.11. Inspection and Entry**

The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

## **2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- 2.12.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of Section 2.12.3 are not met.
- 2.12.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - b. The permitted facility was at the time being properly operated;
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and,
  - d. The permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

## **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

## **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

## **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

## **2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

## **2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13.  
[45CSR§13-10.1]

## **2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

## **2.19. Credible Evidence**

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.  
[45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.  
[45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§15]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.  
[45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45 C.S.R. 11.  
[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

[Reserved]

### 3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
  - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
  - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.  
[WV Code § 22-5-4(a)(15)]



### 3.4. Recordkeeping Requirements

3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.

3.4.2. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§4. *State-Enforceable only.*]

### 3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

3.5.3. **Correspondence.** All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

**If to the DAQ:**

Director  
WVDEP  
Division of Air Quality  
601 57th Street, SE  
Charleston, WV 25304-2345

**If to the USEPA:**

Associate Director  
Office of Enforcement and Permits Review  
(3AP12)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029

3.5.4. **Operating Fee.**

3.5.4.1. In accordance with 45CSR30 Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

#### 4.0. Source-Specific Requirements

##### 4.1. Limitations and Standards

4.1.1. The facility shall, prior to the initial start-up of E11, employ six (6) Clark HRA-8T natural-gas fired compressor engines. The operation of these engines, prior to the initial start-up of E11, shall not exceed the following maximum combined operating and emission limitations:

- a. The engines shall be limited to the maximum operating capacities as shown in Table 4.1.1.a.

Table 4.1.1.a.

Engine No. - Source ID -	Maximum Engine Rating (hp)	Total Combined Annual Operating Limit (bhp-hr/yr)
No. 1 - 002-01 -	1,320	69,379,200
No. 2 - 002-02 -	1,320	
No. 3 - 002-03 -	1,320	
No. 4 - 002-04 -	1,320	
No. 5 - 002-05 -	1,320	
No. 6 - 002-06 -	1,320	

- b. Emissions released from the engines shall not exceed the maximum individual hourly and total combined annual emission limits set forth in Table 4.1.1.b.

Table 4.1.1.b.

Emission Point ID	Pollutant	Emission Limits	
		Individual Hourly (g/hp-hr)	Total Combined Annual (tons/yr)
E01, E02, E03, E04, E05, E06	NO <sub>x</sub>	13.8	619.2
	CO	2.7	168.6

4.1.2. The facility shall, after the initial start-up of E11, employ four (4) Clark HRA-8T natural-gas fired compressor engines. The operation of these engines, after the initial start-up of E11, shall not exceed the following maximum combined operating and emission limitations:

a. The engines shall be limited to the maximum operating capacities as shown in Table 4.1.2.a.

**Table 4.1.2.a.**

<b>Engine No. - Source ID -</b>	<b>Maximum Engine Rating (hp)</b>	<b>Total Combined Annual Operating Limit (bhp-hr/yr)</b>
No. 1 - 002-01 -	1,320	46,252,800
No. 2 - 002-02 -	1,320	
No. 4 - 002-04 -	1,320	
No. 5 - 002-05 -	1,320	

b. Emissions released from the engines shall not exceed the maximum individual hourly and total combined annual emission limits set forth in Table 4.1.2.b.

**Table 4.1.2.b.**

<b>Emission Point ID</b>	<b>Pollutant</b>	<b>Emission Limits</b>	
		<b>Individual Hourly (g/hp-hr)</b>	<b>Total Combined Annual (tons/yr)</b>
E01, E02, E04, E05	NO <sub>x</sub>	13.8	412.8
	CO	2.7	112.4

4.1.3. The facility shall employ three (3) Clark TLA-8 natural-gas fired compressor engines. The operation of these engines shall not exceed the following maximum combined operating and emission limitations:

a. The engines shall be limited to the maximum operating capacities as shown in Table 4.1.3.a.

**Table 4.1.3.a.**

<b>Engine No. - Source ID -</b>	<b>Maximum Engine Rating<sup>(1)</sup> (hp)</b>	<b>Total Combined Annual Operating Limit (bhp-hr/yr)</b>
No. 7 - 002-07 -	2,700	70,956,000
No. 8 - 002-08 -	2,700	
No. 9 - 002-09 -	2,700	

(1) Maximum rating based on standard operating conditions. Under ambient operating conditions (less than 40 °F), the maximum peak rating of each engine is 3,015 horsepower.

- b. Emissions released from the engines shall not exceed the maximum individual hourly and total combined annual emission limits set forth in Table 4.1.3.b.

**Table 4.1.3.b.**

<b>Emission Point ID</b>	<b>Pollutant</b>	<b>Emission Limits</b>	
		<b>Individual Hourly (g/hp-hr)</b>	<b>Total Combined Annual (tons/yr)</b>
E07, E08, E09	NO <sub>x</sub>	9.5	562.5
	CO	3.1	203.4

- 4.1.4. The facility shall employ one (1) Clark TLAD-10 natural-gas fired compressor engine. The operation of this engine shall not exceed the following maximum operating and emission limitations:

- a. The engines shall be limited to the maximum operating capacities as shown in Table 4.1.4.a.

**Table 4.1.4.a.**

<b>Engine No. - Source ID -</b>	<b>Maximum Engine Rating (hp)</b>	<b>Annual Operating Limit (bhp-hr/yr)</b>
No. 10 - 002-10 -	4,640	40,646,400

- b. Emissions released from the engine shall not exceed the maximum hourly and annual emission limits set forth in Table 4.1.4.b.

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**Table 4.1.4.b.**

Emission Point ID	Pollutant	Emission Factor (g/hp-hr)	Maximum Emission Rates	
			Hourly (lb/hr)	Annual (ton/yr)
E10	NO <sub>x</sub>	2.0	20.5	89.6
	CO	2.1	22.5	98.5
	VOC	0.7	8.2	35.8
	SO <sub>2</sub>	0.003	0.1	0.2
	PM <sup>(1)</sup>	0.19	1.9	8.3

(1) All PM emissions assumed to be less than PM<sub>2.5</sub>.

4.1.5. The facility shall employ one (1) Caterpillar G3616 natural-gas fired compressor engine. The operation of this engine shall not exceed the following maximum operating and emission limitations:

a. The engines shall be limited to the maximum operating capacities as shown in Table 4.1.5.a.

**Table 4.1.5.a.**

Engine No. - Source ID -	Maximum Engine Rating (hp)	Annual Operating Limit (bhp-hr/yr)
No. 11 - 002-13 -	4,735	41,478,600

b. Emissions released from the engine shall not exceed the maximum hourly and annual emission limits set forth in Table 4.1.5.b.

**Table 4.1.5.b.**

Emission Point ID	Pollutant	Emission Factor (g/hp-hr)	Maximum Emission Rates	
			Hourly (lb/hr)	Annual (ton/yr)
E11	NO <sub>x</sub>	0.70	7.30	32.00
	CO	0.63	6.52	28.60
	VOC	0.16	1.70	7.42
	SO <sub>2</sub>	0.0024	0.02	0.11
	PM <sup>(1)</sup>	0.034	0.40	1.60
	Formaldehyde	0.114	1.19	5.22

(1) All PM emissions assumed to be less than PM<sub>2.5</sub>.

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- c. The permittee shall install, maintain and operate an oxidation catalyst on engine E11 to reduce CO, VOC, and formaldehyde emissions. The oxidation catalyst shall be utilized at all times the engine is operating.
  - d. Pursuant to 40 CFR 63, Subpart ZZZZ, the permittee shall:
    - (1) Reduce uncontrolled CO emissions by 93 percent or more; or
    - (2) Limit concentration of formaldehyde in the exhaust to 14 ppmvd or less at 15 percent O<sub>2</sub>.  
[40 CFR §63.6600 - Table 2a]
  - e. Pursuant to 40 CFR 63, Subpart ZZZZ, the permittee shall, with respect to the oxidation catalyst:
    - (1) Maintain the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and
    - (2) Maintain the temperature of the exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.  
[40 CFR §63.6600 - Table 2b]
  - f. The permittee shall regularly inspect, maintain, and repair engine E11 and its oxidation catalyst to assure proper operation. The engine and the oxidation catalyst shall be operated, maintained and serviced per manufacturer recommendations. Based on manufacturer recommendations, the permittee must either maintain on-site spare parts for use in immediate repair or participate in a quick turn-around catalyst element cleaning/loaner program with a catalyst supplier.
- 4.1.6 Within 30 days of the initial start-up of engine E11, but no later than May 1, 2009, engines 002-03 and 002-06 shall be removed from service. At a minimum, “removed from service” shall mean disconnection from the fuel supply and removal of piping facilitating compression of gas.
- 4.1.7 Compliance with all annual operating and emission limits shall be determined using a twelve month rolling total. A twelve month rolling total shall mean the sum of the operating parameter at any given time during the previous twelve (12) consecutive calendar months.
- 4.1.8 **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.  
[45CSR§13-5.11.]

## 4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with operating limits set forth in Section 4.1 of this permit, the permittee shall monitor the actual brake horsepower-hours generated by each of the permitted engines.

4.2.2. By January 01, 2008, or an alternate date approved by the Director, the permittee shall monitor the air-to-fuel ratio of Engines 002-01, 002-02, 002-04, 002-05, 002-07, 002-08, and 002-09, and utilize such ratio to maintain compliance with maximum permitted emission limits.

4.2.3. The permittee shall meet all applicable monitoring and compliance demonstration requirements as given under 40 CFR 63, Subpart ZZZZ.

#### 4.3. Testing Requirements

4.3.1. For the purpose of demonstrating compliance with the hourly emission limits set forth in Section 4.1.1., 4.1.2., and 4.1.3. of this permit, the permittee shall conduct annual emissions testing for NO<sub>x</sub> and CO emissions released from engines No. 1 through No. 9 (emission points E01 through E09) using portable emissions analyzers.

Upon utilization of the air-to-fuel ratio monitoring established in Section 4.2.2. of this permit, periodic emissions testing shall be performed once every five (5) years. This periodic testing may be performed using portable emissions analyzers.

4.3.2. Within 60 days after achieving the maximum brake-horsepower at which engine 002-13 will be operated, but not later than 180 days after initial startup, and at such times thereafter as may be required by the Director, the permittee shall conduct, or have conducted, a performance test on engine 002-13 to determine compliance with the NO<sub>x</sub> and CO emission limits specified for Emission Point E11 under Table 4.1.5.b. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 CFR 60, Appendix A. Tests to determine compliance with NO<sub>x</sub> emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 CFR 60, Appendix A.

4.3.3. The permittee shall meet all applicable testing requirements as given under 40 CFR 63, Subpart ZZZZ.

#### 4.4. Recordkeeping Requirements

4.4.1. **Record of Monitoring.** The permittee shall keep records of monitoring information that include the following:

- a. The date, place as defined in this permit and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of the analyses; and
- f. The operating conditions existing at the time of sampling or measurement.



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4.4.2. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

4.4.3. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:

- a. The equipment involved.
- b. Steps taken to minimize emissions during the event.
- c. The duration of the event.
- d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
  - f. Steps taken to correct the malfunction.
  - g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.
- 4.4.4. For the purpose of demonstrating compliance with the monitoring requirements set forth in Section 4.1.1.a., 4.1.2.a., 4.1.3.a., 4.1.4.a., and 4.1.5.a. of this permit, the permittee shall maintain records of the brake horsepower-hours generated by each of the permitted engines. The records shall be maintained in a format that demonstrates compliance with the total maximum combined brake-horsepower hour limits established in Section 4.1 of this permit.
- 4.4.5. For the purpose of demonstrating compliance with the annual emission limits set forth in Section 4.1 of this permit, the permittee shall maintain records of the actual emissions calculated using the actual brake-horsepower hour records of Section 4.4.4 of this permit and the engine specific hourly emission factors. The hourly emission factors used to show compliance for engines E01 - E06 shall be 8.1 g-NO<sub>x</sub>/bhp-hr and 2.2 g-CO/bhp-hr. The hourly emission factors used to show compliance for engines E07 - E09 shall be 7.2 g-NO<sub>x</sub>/bhp-hr and 2.6 g-CO/bhp-hr. The hourly emission factors used to show compliance for engines E10 and E11 shall be those identified in 4.1.4.b, and 4.1.5.b of this permit. The permittee may use engine specific emission factors derived from testing required in Sections 4.3.1. in demonstrating compliance with annual emission limits set forth in Tables 4.1.1.b., 4.1.2.b., 4.1.3.b, 4.1.4.b, and 4.1.5.b of this permit.
- 4.4.6. The permittee shall meet all applicable record-keeping requirements as given under 40 CFR 63, Subpart ZZZZ.

#### 4.5. Reporting Requirements

- 4.5.1. The permittee shall meet all applicable reporting requirements as given under 40 CFR 63, Subpart ZZZZ.

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### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup>

(please use blue ink)

Responsible Official or Authorized Representative \_\_\_\_\_

Date \_\_\_\_\_

Name and Title \_\_\_\_\_

(please print or type)

Name \_\_\_\_\_

Title \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

<sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (I) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
  - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.



Joe Manchin III, Governor  
Stephanie R. Timmermeyer, Cabinet Secretary  
www.wvdep.org

West Virginia Department of Environmental Protection • Division of Air Quality  
Approved: November 14, 2007 Revised: March 23, 2009

Columbia Gas Transmission Compliance Order # CO-R1-C-2007-4A (2005)  
Page 2

1. Columbia Gas Transmission is an owner or operator of two large NO<sub>x</sub> SIP Call engines which emitted more than one ton per day of NO<sub>x</sub> in West Virginia during the 1995 ozone season. These large NO<sub>x</sub> SIP Call engines are part of the NO<sub>x</sub> SIP Call engine inventory:
  - a. Lanham Compressor Station - WV ID# 039-00047 - Point ID 008
  - b. Ceredo Compressor Station - WV ID# 099-00013 - Point ID 009.
2. Columbia Gas Transmission is subject to Phase II of the NO<sub>x</sub> SIP Call because the company owned and operated a large NO<sub>x</sub> SIP Call engine during the 1995 ozone season.
3. Columbia Gas Transmission is therefore subject to the Requirements for Stationary Internal Combustion Engines pursuant to 45CSR§1-90 and must demonstrate a reduction in ozone season NO<sub>x</sub> emissions of 235 tons from 1995 levels, beginning in the 2007 ozone season and each ozone season thereafter, as required under 45CSR§1-90.3.
4. "Ozone season" means the period beginning May 1 of a year and ending on September 30 of the same year, inclusive.
5. Pursuant to 45CSR§1-90.4, such ozone season NO<sub>x</sub> emission reductions must be demonstrated under the requirements of an ozone season NO<sub>x</sub> Compliance Plan approved by the Director.
6. Pursuant to 45CSR§1-90.4.c, the compliance plan shall demonstrate quantifiable and enforceable ozone season NO<sub>x</sub> emission reductions equal to or greater than 235 tons.
7. The NO<sub>x</sub> Compliance Plan is limited to creditable ozone season reductions achieved after 1995 and to controls that were not part of the NO<sub>x</sub> SIP Call engine inventory.
8. Such creditable reductions in NO<sub>x</sub> emissions shall be quantifiable and enforceable through limitations included in a federally enforceable permit or compliance order as set forth in 45CSR§1-90.4.k.
9. Pursuant to 45CSR§1-90.4.d, the NO<sub>x</sub> Compliance Plan may include and affect some or all stationary internal combustion engines or other significant NO<sub>x</sub> emitting equipment at an individual facility, at several facilities, or at all facilities in West Virginia that are controlled by the same owner or operator.
10. On December 13, 2005, Columbia Gas Transmission submitted a NO<sub>x</sub> Compliance Plan to the Division of Air Quality. On December 15, 2005, the Director approved the submitted NO<sub>x</sub> Compliance Plan under Compliance Order No. CO-R1-C-2005-29.
11. Pursuant to 45CSR§1-90.4.l, any owner or operator with an approved compliance plan under subsection 90.4 may amend the plan with written approval of the Director. Any NO<sub>x</sub> emission rate or limitation included in such an amendment must be reflected in a federally enforceable permit or compliance order.

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12. On February 27, 2007, and pursuant to 45CSR§1-90.4.1, Columbia Gas Transmission submitted an amended NO<sub>x</sub> Compliance Plan to the Director for the purpose of including an emission limit reflected in a federally enforceable permit.
13. Columbia Gas Transmission is the owner or operator of the following affected facilities identified in the submitted NO<sub>x</sub> Compliance Plan:
  - a. Flat Top Compressor Station - WV ID# 89-00004
  - b. Clendenin Compressor Station - WV ID# 039-00048
  - c. Hubball Compressor Station - WV ID# 043-00002
  - d. Lost River Compressor Station - WV ID# 031-00002
  - e. Smithfield Compressor Station - WV ID# 103-00010.
14. Ceredo (WV ID# 099-00013) and Lanham (WV ID# 039-00047) compressor stations are not affected facilities under the Columbia Gas Transmission NO<sub>x</sub> Compliance Plan or this Order.
15. This Order does not make any finding of violation against Columbia Gas Transmission.

#### **ORDER FOR COMPLIANCE**

And now, this 1<sup>st</sup> day of March 2007, and in accordance with Chapter 22, Article 5, Section 4(a)(5) of the West Virginia Code, it is hereby ORDERED by the Director:

1. To realize and demonstrate a reduction in ozone season NO<sub>x</sub> emissions of 235 tons as required under 45CSR§1-90.3, Columbia Gas Transmission will take all measures to comply with all terms and conditions of 45CSR§1-90, the NO<sub>x</sub> Compliance Plan, this Order, and applicable permits. Beginning in the 2007 ozone season and each ozone season thereafter, Columbia Gas Transmission will reduce emissions of NO<sub>x</sub> at the facilities below using the following methods. Columbia Gas Transmission will quantify such reductions using mathematical calculations for each facility demonstrated in the NO<sub>x</sub> Compliance Plan:
  - a. Flat Top Compressor Station - WV ID# 089-00004 - Ozone season NO<sub>x</sub> emissions will be reduced by permanent retirement of all existing reciprocating internal combustion engines at the facility. Historic load capacity of the permanently retired reciprocating internal combustion engines will be replaced solely by the existing Solar Taurus 60-T7000 turbine.
  - b. Clendenin Compressor Station - WV ID# 039-00048 - Ozone season NO<sub>x</sub> emissions will be reduced by shifting historic ozone season load capacity from one or more of the existing Cooper-Bessemer LSV engines to the existing Solar Centaur T-4500 turbine.
  - c. Hubball Compressor Station - WV ID# 043-00002 - Ozone season NO<sub>x</sub> emissions will be reduced by creditable reductions resulting from the 2001 installation of low-NO<sub>x</sub> controls on two existing Ingersoll-Rand 48 KVS engines which resulted in a lower NO<sub>x</sub> emission rate and reduced NO<sub>x</sub> emissions.

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- d. Lost River Compressor Station - WV ID# 031-00002 - Ozone season NO<sub>x</sub> emissions will be reduced by shifting historic load capacity from one or more of the existing Clark HRA-8T and/or Clark TLA-8 engines to the existing Clark TLAD-10 clean burn engine.
- e. Smithfield Compressor Station - WV ID# 103-00010 - Ozone season NO<sub>x</sub> emissions will be reduced by shifting historic load capacity from one or more of the existing Ingersoll-Rand 412 KVGB engines to the existing Solar Taurus 60-T7300 turbine.
2. Pursuant to 45CSR§1-90.7.c, Columbia Gas Transmission will submit an ozone season NO<sub>x</sub> Compliance Plan Report to the Director by October 31 of each year, beginning in 2007. The report will demonstrate and certify compliance with the required ozone season NO<sub>x</sub> reduction of 235 tons set forth in 45CSR§1-90.3. The report will quantify and total all creditable ozone season NO<sub>x</sub> reductions from the affected facilities using the methodologies contained in the NO<sub>x</sub> Compliance Plan, in accordance with 45CSR§1-90 and this Order.
3. Columbia Gas Transmission will satisfy all performance test, monitoring and recordkeeping and reporting requirements under 45CSR§1-90 and the NO<sub>x</sub> Compliance Plan.

#### **OTHER PROVISIONS**

1. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Columbia Gas Transmission of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Columbia Gas Transmission to penalties and injunctive relief in accordance with the applicable law.
2. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.
3. This Order is binding on Columbia Gas Transmission, its successors and assigns.

This Order and the NO<sub>x</sub> Compliance Plan shall become effective March 1, 2007.

  
John A. Benedict, Director  
Division of Air Quality

**Promoting a healthy environment.**

e-CFR Data is current as of February 3, 2009

**Title 40: Protection of Environment**

**PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**

**Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines**

**Source: 73 FR 3591, Jan. 18, 2008, unless otherwise noted.**

**What This Subpart Covers**

**§ 60.4230 Am I subject to this subpart?**

**(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.**

**(1) Manufacturers of stationary SI ICE with a maximum engine power less than or equal to 19 kilowatt (KW) (25 horsepower (HP)) that are manufactured on or after July 1, 2008.**

**(2) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are gasoline fueled or that are rich burn engines fueled by liquefied petroleum gas (LPG), where the date of manufacture is:**

**(i) On or after July 1, 2008; or**

**(ii) On or after January 1, 2009, for emergency engines.**

**(3) Manufacturers of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are not gasoline fueled and are not rich burn engines fueled by LPG, where the manufacturer participates in the voluntary manufacturer certification program described in this subpart and where the date of manufacture is:**

**(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);**

**(ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;**

**(iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or**

**(iv) On or after January 1, 2009, for emergency engines.**

**(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:**

**(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);**

**(ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP;**

**(iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or**

(iv) on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

(5) Owners and operators of stationary SI ICE that commence modification or reconstruction after June 12, 2006.

(b) The provisions of this subpart are not applicable to stationary SI ICE being tested at an engine test cell/stand.

(c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(d) For the purposes of this subpart, stationary SI ICE using alcohol-based fuels are considered gasoline engines.

(e) Stationary SI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR parts 90 and 1048, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

(f) Owners and operators of facilities with internal combustion engines that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

#### Emission Standards for Manufacturers

§ 60.4231 What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing such engines?

Please see 40 C.F.R. § 60.4231

§ 60.4232 How long must my engines meet the emission standards if I am a manufacturer of stationary SI internal combustion engines?

Engines manufactured by stationary SI internal combustion engine manufacturers must meet the emission standards as required in §60.4231 during the certified emissions life of the engines.

#### Emission Standards for Owners and Operators

§ 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) manufactured on or after July 1, 2008, must comply with the emission standards in §60.4231(a) for their stationary SI ICE.

(b) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that use gasoline must comply with the emission standards in §60.4231(b) for their stationary SI ICE.

(c) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) manufactured on or after the applicable date in §60.4230(a)(4) that are rich burn engines that



use LPG must comply with the emission standards in §60.4231(c) for their stationary SI ICE.

(d) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards for field testing in 40 CFR 1048.101(c) for their non-emergency stationary SI ICE and with the emission standards in Table 1 to this subpart for their emergency stationary SI ICE. Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) and less than 75 KW (100 HP) manufactured prior to January 1, 2011, that were certified to the standards in Table 1 to this subpart applicable to engines with a maximum engine power greater than or equal to 100 HP and less than 500 HP, may optionally choose to meet those standards.

(e) Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SI ICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

(f) Owners and operators of any modified or reconstructed stationary SI ICE subject to this subpart must meet the requirements as specified in paragraphs (f)(1) through (5) of this section.

(1) Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (a) of this section.

(2) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that use gasoline engines, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (b) of this section.

(3) Owners and operators of stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) that are rich burn engines that use LPG, that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (c) of this section.

(4) Owners and operators of stationary SI natural gas and lean burn LPG engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (d) or (e) of this section, except that such owners and operators of non-emergency engines and emergency engines greater than or equal to 130 HP must meet a nitrogen oxides (NO<sub>x</sub>) emission standard of 3.0 grams per HP-hour (g/HP-hr), a CO emission standard of 4.0 g/HP-hr (5.0 g/HP-hr for non-emergency engines less than 100 HP), and a volatile organic compounds (VOC) emission standard of 1.0 g/HP-hr, or a NO<sub>x</sub> emission standard of 250 ppmvd at 15 percent oxygen (O<sub>2</sub>), a CO emission standard 540 ppmvd at 15 percent O<sub>2</sub> (675 ppmvd at 15 percent O<sub>2</sub> for non-emergency engines less than 100 HP), and a VOC emission standard of 86 ppmvd at 15 percent O<sub>2</sub>, where the date of manufacture of the engine is:

(i) Prior to July 1, 2007, for non-emergency engines with a maximum engine power greater than or equal to 500 HP;

(ii) Prior to July 1, 2008, for non-emergency engines with a maximum engine power less than 500 HP;

(iii) Prior to January 1, 2009, for emergency engines.

(5) Owners and operators of stationary SI landfill/digester gas ICE engines with a maximum engine power greater than 19 KW (25 HP), that are modified or reconstructed after June 12, 2006, must comply with the same emission standards as those specified in paragraph (e) of this section for stationary landfill/digester gas engines.

(g) Owners and operators of stationary SI wellhead gas ICE engines may petition the Administrator for approval on a case-by-case basis to meet emission standards no less stringent than the emission standards that apply to stationary emergency SI engines greater than 25 HP and less than 130 HP due to the presence of high sulfur levels in the fuel, as specified in Table 1 to this subpart. The request must, at a minimum, demonstrate that the fuel has high sulfur levels that prevent the use of aftertreatment controls and also that the owner has reasonably made all attempts possible to obtain an engine that will meet the standards without the use of aftertreatment controls. The petition must request the most stringent standards reasonably applicable to the engine using the fuel.

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

§ 60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

#### Other Requirements for Owners and Operators

§ 60.4235 What fuel requirements must I meet if I am an owner or operator of a stationary SI gasoline fired internal combustion engine subject to this subpart?

Owners and operators of stationary SI ICE subject to this subpart that use gasoline must use gasoline that meets the per gallon sulfur limit in 40 CFR 80.195.

§ 60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?

(a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233.

(b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010.

(c) For emergency stationary SI ICE with a maximum engine power of greater than 19 KW (25 HP), owners and operators may not install engines that do not meet the applicable requirements in §60.4233 after January 1, 2011.

(d) In addition to the requirements specified in §§60.4231 and 60.4233, it is prohibited to import stationary SI ICE less than or equal to 19 KW (25 HP), stationary rich burn LPG SI ICE, and stationary gasoline SI ICE that do not meet the applicable requirements specified in paragraphs (a), (b), and (c) of this section, after the date specified in paragraph (a), (b), and (c) of this section.

(e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.

§ 60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

(a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(b) Starting on January 1, 2011, if the emergency stationary SI internal combustion engine that is greater than or equal to 130 HP and less than 500 HP that was built on or after January 1, 2011, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.

(c) If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine.

Compliance Requirements for Manufacturers

§ 60.4238 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤19 KW (25 HP) or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4238

§ 60.4239 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that use gasoline or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4239

§ 60.4240 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines >19 KW (25 HP) that are rich burn engines that use LPG or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4240

§ 60.4241 What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4241

§ 60.4242 What other requirements must I meet if I am a manufacturer of stationary SI internal combustion engines or equipment containing stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4242

Compliance Requirements for Owners and Operators

§ 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

(a) If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c),

you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator.

(2) If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.

(i) If you are an owner or operator of a stationary SI internal combustion engine less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.

(iii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(1) Purchasing an engine certified according to procedures specified in this subpart, for the same model year and demonstrating compliance according to one of the methods specified in paragraph (a) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.

- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- (c) If you are an owner or operator of a stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(f), you must demonstrate compliance according paragraph (b)(2)(i) or (ii) of this section, except that if you comply according to paragraph (b)(2)(i) of this section, you demonstrate that your non-certified engine complies with the emission standards specified in §60.4233(f).
- (d) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Emergency stationary ICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. For owners and operators of emergency engines, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as permitted in this section, is prohibited.
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.
- (f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).
- (g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
- (h) If you are an owner/operator of an stationary SI internal combustion engine with maximum engine power greater than or equal to 500 HP that is manufactured after July 1, 2007 and before July 1, 2008, and must comply with the emission standards specified in sections 60.4233(b) or (c), you must comply by one of the methods specified in paragraphs (h)(1) through (h)(4) of this section.
- (1) Purchasing an engine certified according to 40 CFR part 1048. The engine must be installed and

configured according to the manufacturer's specifications.

(2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

(3) Keeping records of engine manufacturer data indicating compliance with the standards.

(4) Keeping records of control device vendor data indicating compliance with the standards.

#### Testing Requirements for Owners and Operators

§ 60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Please refer to 40 C.F.R. § 60.4244

#### Notification, Reports, and Records for Owners and Operators

§ 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in

paragraphs (c)(1) through (5) of this section.

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

(d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

[73 FR 3591, Jan. 18, 2008, as amended by 73 FR 59177, Oct. 8, 2008]

### General Provisions

§ 60.4246 What parts of the General Provisions apply to me?

Table 3 to this subpart shows which parts of the General Provisions in §§60.1 through 60.19 apply to you.

### Mobile Source Provisions

§ 60.4247 What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines or a manufacturer of equipment containing such engines?

Please refer to 40 C.F.R. § 60.4247

### Definitions

§ 60.4248 What definitions apply to this subpart?

Please refer to 40 C.F.R. § 60.4248

Table 1 to Subpart JJJJ of Part 60—NO<sub>x</sub>, CO, and VOC Emission Standards for Stationary Non-Emergency SI Engines ≥100 HP (Except Gasoline and Rich Burn LPG), Stationary SI Landfill/Digester Gas Engines, and Stationary Emergency Engines >25 HP

Engine type and fuel	Maximum engine power	Manufacture date	Emission standards <sup>a</sup>					
			g/HP-hr			ppmvd at 15% O <sub>2</sub>		
			NO <sub>x</sub>	CO	VOC <sup>d</sup>	NO <sub>x</sub>	CO	VOC <sup>d</sup>
Non-Emergency SI Natural Gas <sup>b</sup> and Non-Emergency SI Lean Burn LPG <sup>b</sup>	100≤HP<500	7/1/2008	2.0	4.0	1.0	160	540	86
		1/1/2011	1.0	2.0	0.7	82	270	60
Non-Emergency SI Lean Burn Natural Gas and LPG	500>HP<1,350	1/1/2008	2.0	4.0	1.0	160	540	86
		7/1/2010	1.0	2.0	0.7	82	270	60
Non-Emergency SI Natural Gas	HP≥500	7/1/2007	2.0	4.0	1.0	160	540	86



<u>and Non-Emergency SI Lean Burn LPG (except lean burn 500<math>\geq</math>HP&lt;1,350)</u>	<u>HP<math>\geq</math>500</u>	<u>7/1/2010</u>	<u>1.0</u>	<u>2.0</u>	<u>0.7</u>	<u>82</u>	<u>270</u>	<u>60</u>
<u>Landfill/Digester Gas (except lean burn 500<math>\geq</math>HP&lt;1,350)</u>	<u>HP&lt;500</u>	<u>7/1/2008</u> <u>1/1/2011</u>	<u>3.0</u> <u>2.0</u>	<u>5.0</u> <u>5.0</u>	<u>1.0</u> <u>1.0</u>	<u>220</u> <u>150</u>	<u>610</u> <u>610</u>	<u>80</u> <u>80</u>
	<u>HP<math>\geq</math>500</u>	<u>7/1/2007</u> <u>7/1/2010</u>	<u>3.0</u> <u>2.0</u>	<u>5.0</u> <u>5.0</u>	<u>1.0</u> <u>1.0</u>	<u>220</u> <u>150</u>	<u>610</u> <u>610</u>	<u>80</u> <u>80</u>
<u>Landfill/Digester Gas Lean Burn</u>	<u>500<math>\geq</math>HP&lt;1,350</u>	<u>1/1/2008</u> <u>7/1/2010</u>	<u>3.0</u> <u>2.0</u>	<u>5.0</u> <u>5.0</u>	<u>1.0</u> <u>1.0</u>	<u>220</u> <u>150</u>	<u>610</u> <u>610</u>	<u>80</u> <u>80</u>
<u>Emergency</u>	<u>25<math>\geq</math>HP&lt;130</u>	<u>1/1/2009</u>	<u><sup>c</sup>10</u> <u>2.0</u>	<u>38</u> <u>7</u> <u>4.0</u>	<u>N/A</u> <u>1.0</u>	<u>N/A</u> <u>160</u>	<u>N/A</u> <u>540</u>	<u>N/A</u> <u>86</u>
	<u>HP<math>\geq</math>130</u>							

<sup>a</sup>Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O<sub>2</sub>.

<sup>b</sup>Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR part 63, subpart ZZZZ, Table 2A do not have to comply with the CO emission standards of Table 1 of this subpart.

<sup>c</sup>The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NO<sub>x</sub>+HC.

<sup>d</sup>For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

#### Table 2 to Subpart JJJJ of Part 60—Requirements for Performance Tests

Please refer to Table 2 to Subpart JJJJ of Part 40 C.F.R. Part 60.

#### Table 3 to Subpart JJJJ of Part 60—Applicability of General Provisions to Subpart JJJJ

Please refer to Table 3 of 40 C.F.R. 60 Subpart JJJJ

#### Table 4 to Subpart JJJJ of Part 60—Applicability of Mobile Source Provisions for Manufacturers Participating in the Voluntary Certification Program and Certifying Stationary SI ICE to Emission Standards in Table 1 of Subpart JJJJ

Please refer to Table 4 of 40 C.F.R. 60 Subpart JJJJ